

Title (en)

SOUNDPROOF STRUCTURE AND METHOD FOR MANUFACTURING SOUNDPROOF STRUCTURE

Title (de)

SCHALLDICHTE STRUKTUR UND VERFAHREN ZUR HERSTELLUNG EINER SCHALLDICHTEN STRUKTUR

Title (fr)

STRUCTURE D'INSONORISATION ET SON PROCÉDÉ DE FABRICATION

Publication

**EP 3264411 A4 20180103 (EN)**

Application

**EP 16755703 A 20160226**

Priority

- JP 2015039481 A 20150227
- JP 2016055883 W 20160226

Abstract (en)

[origin: EP3264411A1] A soundproof structure includes one or more soundproof cells. Each of the one or more soundproof cells includes a frame having a hole portion, a vibratable film fixed to the frame so as to cover the hole portion, and one or more through holes drilled in the film. Both end portions of the hole portion of the frame are not closed, and the frame and the film are formed of the same material and are integrally formed. Therefore, it is possible to provide a soundproof structure and a soundproof structure manufacturing method capable of not only stably insulating sound due to increased resistance to environmental change or aging but also avoiding problems in manufacturing, such as uniform adhesion or bonding of a film to a frame.

IPC 8 full level

**G10K 11/16** (2006.01); **E04B 1/84** (2006.01); **E04B 1/86** (2006.01); **G10K 11/172** (2006.01)

CPC (source: EP US)

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**G10K 11/172** (2013.01 - EP US); B29C 2035/0827 (2013.01 - EP US); B29K 2105/04 (2013.01 - EP US); B29K 2995/0002 (2013.01 - EP US);  
B60R 13/08 (2013.01 - EP US); E04B 2001/8452 (2013.01 - US); E04B 2001/8485 (2013.01 - EP US)

Citation (search report)

- [XY] JP 2005031240 A 20050203 - NAKANISHI METAL WORKS CO
- [Y] US 4257998 A 19810324 - DIEPENBROCK JR JAMES L, et al
- [Y] US 2011240402 A1 20111006 - CHOU JUNG-TSUNG [TW], et al
- See references of WO 2016136959A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3264411 A1 20180103; EP 3264411 A4 20180103; EP 3264411 B1 20191030;** CN 107251136 A 20171013; CN 107251136 B 20210212;  
JP 2016161720 A 20160905; JP 6114325 B2 20170412; US 2018002919 A1 20180104; WO 2016136959 A1 20160901

DOCDB simple family (application)

**EP 16755703 A 20160226;** CN 201680011761 A 20160226; JP 2015039481 A 20150227; JP 2016055883 W 20160226;  
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